Re claim 1 (page 6, line 1):

~~The system to record~~

A system to record

Re claim 2 (page 6, line 22):

~~The method and program~~

A method and a program

Re claim 3 (page 7, line 10):

~~The system to play back the sound from the 2-dimensional bar code~~

A system to play back a sound from a 2-dimensional bar code

Re claim 4 (page 7, line 17):

~~The system to play back the sound from the 2-dimensional bar code~~

A system to play back a sound from a 2-dimensional bar code

REMARKS

This amendment and response is responsive to the Office Action of 06/03/2005.

Claims 1-4 remain in the application. Claims 1-4 were corrected complied the requirement of the examiner. No new matter has been added.

Claim Rejections - 35 USC 103

4. Claims 1-2 are rejected under 35 U.S.C. 103(a) as being not patentable over Bell et al. (U.S. 5,276,472) in view of Yamada et al. (U.S. 5,873,735).

Bell et al. disclose a "Photographic film still camera system with audio recording". (Bell et al. [54] TITLE) In Bell's "film still camera system", "Audio to be recorded in a photographic film camera in association with individual exposed frames is first digitized and stored in a temporary storage memory in the camera allowing playback through a speaker mounted in the camera to permit playback review and editing, as needed. When the film is advanced in the camera to the next exposure frame, the digital audio signal is recorded on a magnetic layer formed on the film. At the photofinisher, the digital audio signal is read and converted to suitable encoding format, such as bar code or binary coded blister marks which are impressed on the photo print for subsequent playback." (Bell et al. [57] ABSTRACT) Therefore, Bell et al. teach us how to use a "film still camera" "to record audio" in "a magnetic layer formed on the film" when you take a picture, and "at the photofinisher" how to use a special "photo finishing apparatus including magnetic read means for reading the digital audio signal recorded on the film magnetic layer", (Bell's claim 1, Col. 6, Lines 51+) and print the audio at photo print as "bar code" or "blister marks" "for subsequent playback". (Bell's claim 1, Col. 6, Lines 55+)

In contrast, my invention is in "the personal and commercial talking photographs and pictures field". ([FIELD OF THE INVENTION]) My invention teaches people how to use a "Personal Computer (PC)" to print any sound on to a photograph or a picture as "2-dimensional bar code" and how to use a PC to read back the "2-dimensional bar code" and play back the sound.

"Thus, with a PC, including the desktop PC, the laptop PC, the palm PC, the cellular phone, the PDA, and any other computer, plus the sound recording device, printer, and optical scanner or digital camera header, the ordinary users can record and play back their voice or song or any sound to and from their photograph; or record and play back the music to and from a scenic picture or postcard; or record

and play back the greeting speech to and from a greeting card." ([SUMMARY OF THE INVENTION])

My invention requires neither a "film still camera" and a special "magnetic layer" on the film to record audio, nor a special "photo finishing apparatus" to read back audio "recorded on the film magnetic layer". My invention discloses a low cost and an easy way (using PC) to record and play back the sound, speech, or music on a photograph, a scenic picture or a greeting card. Every one can print any sound on to any photograph or picture and play back the sound using their PC at home or anywhere.

Bell et al. does not show or disclose the claimed features of my invention. Bell et al. does not show or suggest using "PC". Bell et al. does not show or suggest using "2-dimensional bar code". Withdrawal of this rejection is respectfully requested.

Re claim 1: My invention claims "A system to record a sound to a photograph and to play back" which using "a Personal Computer" (Claim 1 (b)(c)(d)(e)(f)(g)(h)). The "PC" is a well defined concept. A "PC" normally comprises: 1) the hardware, including a CPU, a Memory, an Internal high speed data bus, the input and output ports and a hard disk or a flash memory; 2) the software, including Windows, Unix, Linux, Dos, or other Real Time Operating Systems and various application programs. In my invention, the "PC" means "the desktop PC, the laptop PC, the palm PC, the cellular phone, the PDA, and any other computers". ([SUMMARY OF THE INVENTION]) Bell's invention did not use this kind "PC", even did not use the word "PC" in their invention. In my invention, by using a "PC" and a printer, users can record sound; by using a "PC" and a scanner, users can play back the sound. This "PC" is different from the Bell's "processing circuit 24", and can not be substituted by the Bell's "processing circuit 24".

Bell et al. never use the word "2-dimensional bar code" in their invention, and the "bar code" showed in the Bell's Fig. 5 also is a 1-dimensional bar code. The 1-dimensional bar code only can record no more then 20 Bytes information and can not be used to record digital audio, because even using MP3 coding technology, one second audio needs 1000 Bytes for recording.

Re claim2: My invention claims "a method and a program to recording a sound to a photograph and to play back, running in a Personal Computer"(Claim 2); and the method and program use "2-dimensional bar code" (Claim 2 (b)(c)(d)(e)(f)).

The method and program are "running in a Personal Computer". (Claim 2) As described above, Bell et al. have never showed or suggested a "Personal Computer" as well as "2-dimensional bar code".

Thus, "as a whole", "at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains", it "would have been obvious" that my invention is different from Bell et al. Withdrawal of this rejection is respectfully requested.

Yamada et al. (U.S.5,873,735) disclosed a "Information reproducer and information creating unit". It comprises "An information reproducer which includes a reading device for reading visual information and sound information printed on a printing sheet, a storage device for storing visual information and sound information read by the reading device, a display device for selectively displaying the stored visual information on a screen, a visual information designating device for designating a partial area of the visual information displayed on the display screen, a connecting device for connecting the partial area of the visual information designated by the designating device with a part of the sound information corresponding thereto, and a sound information reproducing device for reading, from the storage device, and reproducing the sound information connected with the designated visual information."

Also, "as a whole", "at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains", it "would have been obvious" that my invention is more similar to Yamada et al. than Bell et al.

Every word and every sentence cited from Bell et al. which are used by the examiner to argue against my invention can be applied to against Yamada's invention. But Bell's patent cannot cover Yamada's, because Yamada's invention have been patentable over Bell et al., Thus, my invention will be also patentable over Bell et al.

Now, the question is "Is my invention patentable over Yamada et al.?"

Yamada's invention is very similar as Japanese Laid-Open Patent No. 5-12288, Japanese Laid-Open Patent No. 3-11482, Japanese Laid-Open Patent No. 61-177068, and Japanese Laid-Open Patent No. 3-291754. The differences between Yamada's and these Japanese Patents are very small: (cited from Yamada's patent U.S.5873735 Col 1, line 35 to Col 2, line 65)

"Japanese Laid-Open Patent No. 5-12288 has disclosed an information processor in which document information and the encoded document information are printed and used. According to the information processor described above, the document information is converted into the encoded information having one-dimensional bar code such as JIS code, and the encoded information thus obtained is printed on a recording sheet. The recording sheet is read and inverted as required, so that the encoded information is returned to the document information for use. In the case where the recording sheet is copied or transmitted by a facsimile, the encoded information is not degraded and information absence or error can be prevented from occurring very often.

However, since information volume expressed in bar code which can be recorded on a printing sheet or the like is small, application is restricted. For example, the printing sheet is not suitable for encoded sound information. Sound information is generally recorded on a record medium such as a magnetic tape or a CD. Instead, a printing sheet which records the sound information in two-dimensional bar code having a mesh pattern has been considered.

The two-dimensional bar code means a mark (two dimensional pattern) which can optically be read and given to virtual matrix (two-dimensional) lattice.

Japanese Laid-Open Patent No. 3-11482 has disclosed a sound recording method and device and a sound reproducing method and device wherein sound information is printed on a printing sheet in two-dimensional bar code. According to the sound recording method and device and the sound reproducing method and device, a sound is digitized, and the digital data thus obtained is converted into an image having a mesh pattern so as to be printed

on a printing sheet. Inversely, the printing sheet on which the image having a mesh pattern is printed is read by an image reader, digitized and analog-converted so that a sound can be reproduced.

Although sound information can be printed on the sheet, it is not related to other printing information on the periphery. The sound information recorded on a sheet is only reproduced as a group of sound information and cannot be further utilized.

Accordingly, if it is possible to relate the sound information to other visual information, and to reproduce the sound information as required, and call and edit the visual information corresponding to the sound information, additional values can be obtained.

There have been known an apparatus in which the document for plural pages can be reduced and printed on a sheet (for example, see Japanese Laid-Open Patent No. 61-177068) and an apparatus in which a plurality of document information are collectively output to a single-unit copying sheet, the abstract of the document information stored in a storage sheet is created and retrieval information is added to a copying sheet (for example, see Japanese Laid-Open Patent No. 3-291754).

However, even though plural kinds of information such as document information, image information and the like are reduced, printed and arranged on a sheet, and such information is read from the printing sheet by a scanner, the information are not reduced by encoding so that it is hard to restore and reuse them as type information.

SUMMARY OF THE INVENTION

In consideration of such circumstances, it is an object of the present invention to provide an information reproducer and an information creating unit in which the sound information printed on a printing sheet in two-dimensional bar code is related to the visual information so that the sound information requested by the visual information can be outputted as required, and the contents of the visual information can be displayed according to the outputted sound information.

Thus, the present invention provides an information reproducer including a reading structure for reading visual information and sound information printed on a printing sheet; a storage device for storing the visual

information and the sound information read by the reading structure; a display device for selectively displaying the stored visual information on a screen; a visual information designating structure for partially designating an area of the visual information displayed on the display screen; a connecting structure for connecting a part of the visual information designated by the designating structure with a part of the sound information corresponding thereto; and a sound information reproducing structure for reading from the storage device and reproducing the sound information connected with the designated visual information.

The information reproducer of the present invention uses a print sheet created by an information creating unit including a visual information input for inputing visual information, a sound information input for inputing sound information, a related information input for inputing the related information which relates the visual information to the sound information, and a printing structure for printing the visual information, the sound information and the related information together on a printing sheet."

As cited above, Yamada's invention is in the same field as above Japanese patents, and very similar to them. But Yamada's invention obtained patent over these Japanese patents, because Yamada's invention has a small difference from them.

Any "person having ordinary skill in the art to which said subject matter pertains" can see that my invention has much more difference from Yamada's and above Japanese inventions.

Thus, my invention is patentable over Yamada et al. Withdrawal of this rejection is respectfully requested.

Yamada's invention "relates to an information reproducer and an information creating unit, and more particularly to an information processing system wherein sound information converted into two-dimensional bar code is related to visual information (an information source such as document information, image information and graphic information) which has been utilized by various document processors such as a Japanese word processor, various image processors such as an optical file, and communication terminals, POS terminals, cash registers having various

information transferring functions and the like, the related information thus obtained is printed on a printing sheet, and the visual information and the sound information are connected together based on the related information which is printed so as to transfer information. "

My invention is in the different field. It is in "the personal and commercial talking photographs and pictures field". ([FIELD OF THE INVENTION])

My invention claims "using Personal Computer" (Claim1), Yamada et al. did not show or suggest or claim "using Personal Computer". Withdrawal of this rejection is respectfully requested.

My invention claims "a program to recording sound to a photograph and to play back, running in a Personal Computer" (Claim 2). It means my invention can be a CD with a "program" inside; when the "program" installed and running in a "Personal Computer", it can "recording sound to a photograph and to play back". Yamada et al. did not show or suggest a CD or "a program... running in a Personal Computer", Withdrawal of this rejection is respectfully requested.

6. Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bell et al. (U.S. 5,276,472) in view of Yamaguchi et al. (U.S. 2003/0198383).

Different means is a different patent. 15 years ago, there were no a digital camera and a "cellular phone with an embedded digital camera". Bell et al. cannot invent, cannot show, and cannot suggest this "means" to "taking picture". My Invention shows, suggests and claims a new method to play back the sound (using a digital camera or a cellular phone with embedded digital camera to play back the sound). It is completely different from Bell et al. Withdrawal of this rejection is respectfully requested.

Yamaguchi's invention (US 2003/0198383) "relates to an image data processing device having an image input device, and more particularly, to a portable device that can be used with an image input device such as a camera, or the like, and a communications path."

Yamaguchi's invention and my invention are in the different field, although it using a cell phone with a embedded camera.

Any "person having ordinary skill in the art to which said subject matter pertains" can see that my invention is very different from Yamaguchi's invention. My invention uses cell phone to produce sound, Yamaguchi uses cell phone to produce index to retrieve information.

Yamaguchi's invention did not show or suggest or claim "talking photograph" or "talking picture", Yamaguchi's invention did not show or suggest or claim using a cell phone to produce sound. Withdrawal of this rejection is respectfully requested.

CONCLUSION

My invention shows and suggests a new, easy and low cost method to record and play back sound (using a PC to record and play back the sound). All of the claims remain in the application. Withdrawal all of rejections is respectfully requested.

McIntyre et al. (U.S. 6,102,505), Edwards (U.S. 6,180,312), Nelsons et al. (U.S. 6,431,448) all did not show or suggest or claim to use PC to record and play back sound.

Respectfully submitted,

Tianmo Lei
Cupertino CA95014
(408) 4294637

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on 08/10/2005.

Tianmo Lei
Cupertino CA95014
(408) 4294637